

REMARKS

This communication is submitted in response to the Office Action dated July 13, 2006.

Claims 1-26 are pending in the subject patent application, with claims 1, 5 and 11 being amended herewith. Claims 2-4, 6-10 and 12-26 have not been changed relative to their immediate prior version.

Reconsideration of the subject patent application is respectfully requested in view of the foregoing amendments and the following remarks.

Claims 1-9 and 12-26 stand allowed by the Examiner, with objections being raised with respect to claims 1 and 5 on account of an extraneous space being present before a semicolon in each of the claims. Accordingly, claims 1 and 5 have been amended herewith to delete the extraneous space from the claims, and claims 1 and 5 as amended are submitted to overcome the objection raised by the Examiner.

Claim 11 stands objected to by the Examiner as being dependent upon a rejected base claim but was indicated as being allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Claim 11 stands objected to further due to their being a colon and a period at the end of the claim. Claim 11 has been amended to be rewritten in independent form to include all of the limitations of its base claim, there being no intervening claims, and to delete the extraneous colon at the end of the claim. Accordingly, claim 11 as amended is submitted to overcome the objections raised by the Examiner and should now be in condition for allowance.

The rejection of independent claim 10 as being anticipated by U.S. Patent

Application Publication No. 2001/0031916 A1 to Bennett et al is respectfully traversed for the following reasons.

Independent claim 10 requires the steps of placing a first electrode in a muscle of the patient enervated by a selected nerve, placing a second electrode in a muscle of the patient not enervated by the selected nerve, stimulating the selected nerve, monitoring the first electrode for electrical activity and simultaneously monitoring the second electrode for electrical activity, and producing an output signal in response to the monitoring. The step of producing recited in claim 10 involves producing an output signal indicative of artifact if non-repetitive electrical activity is detected at both the first and second electrodes, producing an output signal indicative of an electromyographic response if non-repetitive electrical activity is detected at the first electrode but not at the second electrode, or producing an output signal indicative of potentially inadequate anesthesia if repetitive electrical activity is detected at both the first and second electrodes. The method recited in claim 10 is not anticipated by Bennett et al.

First of all, it is important to note that Bennett et al utilizes stimulator electrodes 114H and 114L to stimulate the upper branch of the facial nerve only upon temporary suspension of the recording of electromyographic responses (Bennett et al, paragraph 0087, lines 11-19). Bennett et al thusly does not produce an output signal in response to stimulation by stimulator electrodes 114H and 114L indicative of an electromyographic response depending on the type of electrical activity detected at first and second electrodes placed in muscles of the patient. Furthermore, the stimulator electrodes 114H and 114L of Bennett et al are used to stimulate or activate the facial nerve and, in response to this stimulation, to record a response only at the Corrugator

muscle area in the face via the sensor 104 (Bennett et al, paragraph 0088, lines 1-4). In fact, Bennett et al explicitly discloses that the stimulation delivered by the stimulator electrodes 114H and 114L stimulates the Corrugator nerve but is not effective at stimulating muscles within the tissues (Bennett et al, paragraph 0087, lines 25-31). In the method disclosed by Bennett et al, the sensor 104 records a response to the stimulation without a second sensor or electrode being monitored simultaneously for electrical activity (Bennett et al, paragraph 0088). This is in direct contrast to the step of monitoring recited in claim 10 which involves monitoring a first electrode, placed in a muscle enervated by a selected nerve, for electrical activity and simultaneously monitoring a second electrode, placed in a muscle not enervated by the selected nerve, for electrical activity.

The passages of Bennett et al specifically referred to by the Examiner do not disclose or suggest any of the steps recited in claim 10 that they are asserted by the Examiner to disclose. Paragraphs 0085 and 0086 of Bennett et al referred to by the Examiner discuss monitoring the signals generated by first through fifth electrode sensors 102, 104, 106, 108 and 110 placed in different muscle groups of the patient for the recording of electromyograms by the monitoring device 13. As pointed out above, the monitoring of electromyographic activity is intentionally suspended in the method of Bennett et al when the facial nerve is stimulated via the electrodes 114H and 114L. To reemphasize the point made above, the only sensor that is monitored for output when the facial nerve is stimulated by the stimulator electrodes 114H and 114L is the sensor 104 located in the muscle that is enervated by the stimulated nerve. This is entirely different from the method embodied in the steps of placing, stimulating and monitoring

as recited in claim 10. Another significant distinction between the method of Bennett et al and the claimed method relates to the fact that Bennett et al does not differentiate the type of electrical activity, i.e. non-repetitive electrical activity or repetitive electrical activity, detected at any of the sensors. It follows that Bennett et al does not and cannot be construed as disclosing or suggesting the step of producing recited in claim 10 which involves producing an output signal indicative of artifact if non-repetitive electrical activity is detected at both the first and second electrodes, producing an output signal indicative of an electromyographic response if non-repetitive electrical activity is detected at the first electrode but not at the second electrode, or producing an output signal indicative of potentially inadequate anesthesia if repetitive electrical activity is detected at both the first and second electrodes. With respect to artifact detection, Bennett et al takes an entirely different approach from the claimed invention and relies on an actual artifact detector device connected to the cauterizing device or other instrument generating artifact (Bennett et al, paragraph 0082). The use of an artifact detector has nothing whatsoever to do with the claimed method which involves producing an output signal indicative of artifact in accordance with the types of electrical activity detected at first and second electrodes when the electrodes are simultaneously monitored in response to stimulation of a nerve. The technique disclosed by Bennett et al for monitoring the patient's state of consciousness during the administration of anesthesia is also entirely different than the approach embodied in claim 10 for indicating potentially inadequate anesthesia. In particular, Bennett et al requires a comparison between a Corrugator nerve stimulator signal obtained from the patient prior to the administration of anesthesia and a subsequent Corrugator stimulator signal

obtained from the patient while under anesthesia (Bennett et al, paragraphs 0097-0098). In contrast, the step of producing recited in claim 10 involves producing an output signal indicative of potentially inadequate anesthesia if repetitive electrical activity is detected at both the first and second electrodes in response to nerve stimulation and monitoring of electrical activity at the electrodes while the patient is anesthetized. The aforementioned distinctions between the method disclosed by Bennett et al and the method claimed in independent claim 10 demonstrate that the rejection of claim 10 as being anticipated by Bennett et al is clearly improper. Accordingly, independent claim 10 is submitted to be clearly patentable over Bennett et al and should be allowed.

In light of the foregoing, the subject patent application is submitted to be in condition for allowance. Action in conformance therewith is courteously solicited. Should any issues in the subject application remain unresolved, the Examiner is encouraged to contact the undersigned attorney.

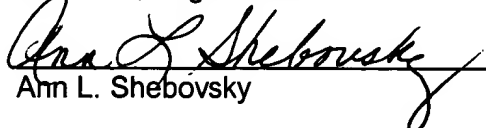
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I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop: Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on October 6, 2006.



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